



2015/2016 STORMWATER LOW IMPACT DEVELOPMENT CODE REVIEW PROJECT

Project Summary

Along with other jurisdictions, City of Kirkland staff are required to revise our development codes and standards to make stormwater low impact development (LID) the preferred and commonly-used approach to site development. Specifically, we are required to review, revise, and make effective our development-related codes, rules, standards, and other enforceable documents to incorporate stormwater LID principles and BMPs (measures to minimize impervious surface, minimize loss of vegetation, and minimize stormwater runoff). This code update is required through our current National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit (per section S5.C.4.f.i and ii, see detail on next page).

This entire process will take around 12-18 months. Surface water staff will lead this project, but it will require a significant amount of city staff time from the following other departments:

- Planning and Community Development (especially planner staff time since this project is revising zoning codes)
- Public Works
- Fire and Building
- Parks
- City Attorney's Office
- City Manager's Office

The following is available to facilitate this project:

1. 2015/2016 SW LID Code Review Work Plan – including team members, project timeline, and table of code topics to address.
2. Integrating LID into Local Codes: A Guidebook for Local Governments (Puget Sound Partnership, July 2012), available at the following website:
http://www.psp.wa.gov/LID_manual.php
3. Low Impact Development Code Update and Integration Toolkit (WA Dept. of Ecology, July 2014), available at the following website:
<http://www.wastormwatercenter.org/lidcodeintegration/>

The following text is from our 2013-2018 NPDES Western WA Phase II Municipal Stormwater Permit (section S5.C.4.f.i and ii):

No later than December 31, 2016, Permittees shall review, revise, and make effective their local development-related codes, rules, standards, or other enforceable documents to incorporate and require LID principles and LID BMPs.

The intent of the revisions shall be to make LID the preferred and commonly-used approach to site development. The revisions shall be designed to minimize impervious surfaces, native vegetation loss and stormwater runoff in all types of development situations. Permittees shall conduct a similar review and revision process, and consider the range of issues, outlined in the following document: Integrating LID into Local Codes: A Guidebook for Local Governments (Puget Sound Partnership, 2012).

...each Permittee shall submit a summary of the results of the review and revision process above with the annual report due no later than March 31, 2017. This summary shall include, at a minimum, a list of the participants (job title, brief job description, and department represented), the codes, rules, standards, and other enforceable documents reviewed, and the revisions made to those documents which incorporate and require LID principles and LID BMPs. The summary shall include existing requirements for LID principles and LID BMPs in development-related codes. The summary shall be organized as follows:

- a) Measures to minimize impervious surfaces;*
- b) Measures to minimize loss of native vegetation; and*
- c) Other measures to minimize stormwater runoff.*

STORMWATER LOW IMPACT DEVELOPMENT CODE REVIEW PROJECT

2015/2016 WORK PLAN

Assemble the Project Team (see Table A.1)

1. Identify team members.
2. Include staff from Public Works (Development Engineering, Operations & Maintenance, and Capital Improvement Program), Planning & Building, Fire, Parks, and City Attorney's Office. Consider City Manager's Office, Planning Commission, Councils, and external stakeholders (like developers' forum, neighborhood groups, environmental groups, special districts, etc.).
3. Develop project timeline (see Table A.2).
4. Meeting schedule. Meetings will be scheduled several weeks in advance, based on staff and room availability.

Identify Topics to Address (see Table B.1).

1. Landscaping, Native Vegetation, and Street Landscaping
2. Site Planning and Assessment
3. Hard and Impervious Surfaces
4. Bulk and Dimensional Considerations
5. Subdivision and Planned Unit Development
6. Critical Areas and Shoreline Management
7. Clearing and Grading
8. Streets and Roads
9. Healthy Soils
10. Parking
11. Design Guidelines and Standards
12. Stormwater Management and Maintenance

Review Existing Codes and Standards (Gap Analysis)

1. Identify codes relating to the specific topics.
2. Identify existing codes and standards already meeting criteria.
3. Identify gaps in existing codes and standards.
4. Identify codes/standards that currently offer incentives for stormwater LID. Since LID will be required, the incentives may need to be removed.

Review the following documents:

- PCD Comprehensive Plan
- Zoning Code (check Holmes Point & Houghton areas for differences)
- Municipal Code
- Shoreline Management Plan
- Subdivision code/standard documents
- Public Works Pre-Approved Plans
- CIP Engineering and Street Standards (WSDOT/other)
- ROW Tree Inventory

Amend Existing Codes/Standards and Develop New Codes/Standards (fill the gaps)

1. Propose amendments to existing codes and standards.
2. Propose new codes and standards.
3. Internal review, revisions, and approval.

Public Review and Adoption Process

1. Public review and approval.
2. Planning Commission review and approval.
3. Council review and approval (Kirkland and Houghton).
4. Adopt and Implement by December 31, 2016.

Ensure Successful Implementation

1. Develop and implement training plan of new and revised codes and standards for:
 - City staff
 - Applicants, engineers, contractors (through Developers Forum)
 - Property Owners
 - General Public

WORK PLAN

Table A.1 Project Team

Internal Team Members

Project Team Lead: Stacey Rush

Department	Subject/Expertise	Employee
Planning & Building	Policy, Urban Forester	*Deborah Powers
	Policy & development review	*Dorian Collins
	Policy, critical areas	Teresa Swan
	Policy, critical areas	Joan Lieberman-Brill
	Policy, Manager	Jeremy McMahan
	Engineering, inspection and review	Tom Jensen
	Policy, Deputy Director	*Paul Stewart
PW	Engineering, stormwater	*Stacey Rush
	Policy, stormwater	*Anne Dettelbach
	Policy & engineering, stormwater	*Jenny Gaus
	Private development engineering	John Burkhalter
	Capital streets/road engineering	Capital staff
	O&M, public facilities, inspections	Erin Devoto
	Construction inspection	Tom Chriest
	Engineering Manager	*Rob Jammerman
Fire	Emergency response access, street widths and layouts, etc.	Grace Steuart
Parks	Parks	staff
CAO	Legal	staff
Planning Commission	Policy	n/a
Houghton Council	Policy	n/a
Kirkland Council	Policy	n/a
PW/CMO	Public Outreach	Kathy Cummings

*Primary staff for this project

External Stakeholders

- Developers Forum (Private Developers, Engineers, Property Owners)
- Neighborhood Groups
- Environmental groups
- Special Districts

Table A.2 NPDES Stormwater LID Code Review Timeline	2015								2016												2017			
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar		
Assemble the Project Team																								
Develop work plan				Completed																				
Develop meeting schedule						Completed																		
Identify/Understand Topics to Address				Completed																				
Review Existing Codes and Standards																								
Identify codes relating to the specific topics														Completed										
Identify existing codes and standards meeting criteria															Completed									
Identify gaps in existing codes and standards															Completed									
Amend Existing Codes, Develop New Codes																								
Propose amendments to existing codes and standards																								
Propose new codes and standards																								
Internal review, revisions, and approval																								
Public Review and Adoption Process																								
SEPA process																								
Public review and approval																								
Planning Commission review and approval																								
Council review and approval																								
	Adopt and Implement by Dec 31, 2016																							
Ensure Successful Implementation																								
Develop and implement training plan for: city staff, engineers, developers, contractors, property owners, general public																								

2015/2016 NPDES Stormwater LID Code Review											
Table B.1 Code Topics to Address		Code and Standard Documents to Review									
Goal:	Revise codes with the following: <i>(1) Measures to minimize impervious surfaces</i> <i>(2) Measures to minimize loss of native vegetation</i> <i>(3) Other measures to minimize stormwater runoff</i>	Kirkland Zoning Code	Zoning Code specific to Houghton	Zoning Code specific to Holmes Pt.	Kirkland Municipal Code	PCD Comp. Plan	Shoreline Mgmt Plan	Sudivision Code/standard documents	PW Pre- Approved Plans	CIP Eng & Street Standards (WSDOT/other)	Other (ROW Tree Inventory)
Review codes and standards that include the following topics:											
Table 1. Landscaping, Native Vegetation, and Street Landscaping - PW and PCD											
	tree preservation/retention	Separate tables were created for each topic - see Gap Analysis Table									
	screening (site, parking, perimeter)										
	landscape requirements for street frontages										
	landscape requirements for parking lots										
	minimize disturbance areas										
	utility setbacks for trees										
	public safety (site limits at intersections, hazard trees)										
	tree and landscape installation and maintenance										
Table 2. Site Planning and Assessment - PW and PCD											
minimize site grading, preserve natural watercourses, preserve native vegetation and soils											
	Building locations										
	parking area locations										
	stormwater BMP/facility locations										
	critical areas										
	clustering housing										
	special districts										
	location of existing utilities										
	street use improvements										
	emergency access										
Table 3. Hard and Impervious Surfaces - PW											
"Hard surfaces" are permeable pavements, impervious surfaces, or vegetated roofs											
	maximum impervious surface allowances										
	shared driveways										
	minimum driveway width										
	use of permeable pavement for driveways										
	two-track driveway design										
Table 4. Bulk and Dimensional Considerations - PCD											
Look for flexibility in increasing heights, reducing setbacks, clustering structures, minimizing footprint, conserving existing vegetation											
	building setbacks, lot setbacks										
	height limits										
	maximum square footage										
	floor to area ratios										
	clustering										
	stormwater facility setbacks										

Table B.1 Code Topics to Address (continued)		Code and Standard Documents to Review									
Goal:	Revise codes with the following: (1) Measures to minimize impervious surfaces (2) Measures to minimize loss of native vegetation (3) Other measures to minimize stormwater runoff	Kirkland Zoning Code	Zoning Code specific to Houghton	Zoning Code specific to Holmes Pt.	Kirkland Municipal Code	PCD Comp. Plan	Shoreline Mgmt Plan	Sudivision code/standard documents	PW Pre- Approved Plans	CIP Eng & Street Standards (WSDOT/other)	Other (ROW Tree Inventory)
Table 11. Design Guidelines and Standards											
	trees and bioretention	Separate tables were created for each topic - see Gap Analysis									
	continuous curb requirements										
	curb radii										
	ADA										
	restrictions in high urban areas (downtown)										
	Pre-Approved Plans										
Table 12. Stormwater Management and Maintenance - PW											
	process to determine public or private maint responsibility										
	For Privately maintained facilities:										
	mechanism to preserve and maintain facility (tract, easement, covenant, title)										
	maintenance specifications in place										
	mechanism for access, inspection, enforcement process										
	education plan, signage										
	For Publicly maintained facilities:										
	mechanism to preserve and maintain facility (public ROW, tract, easements)										
	maintenance specifications in place										
	mechanism for access, inspection, enforcement process										
	education plan, signage										